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Plan Reviewers for Stormwater Management

Department of Environmental Quality
Office of Training Services

Instructors:

Tammy Cohen, Ph.D. & Robert Cooper, P.E.

Agenda – Day 1

- 8:30 – 9:30 **Module 1** –Introduction to the VSMP
- 9:30 – 10:30 **Module 2** – The VSMP Process and Plan Review
- 10:30 – 10:45 **Break**
- 10:45 – 12:30 **Module 3** – Stormwater Engineering Concepts
- 12:30 – 1:30 **Lunch** (on your own)
- 1:30 –3:30 **Module 4** – Virginia Runoff Reduction Method
- 3:30 – 4:30 ***Exercise 1** – Runoff Reduction Method*
- 4:30 – 5:00 **Questions and Answers**

Agenda – Day 2

8:30 – 9:45 **Module 5** – Stormwater Quantity Requirements

9:45 – 10:00 **Break**

10:00 – 11:00 ***Exercise 2*** – *Energy Balance*

11:00 – Noon **Module 6** – Overview of 15 Non-Prop. BMPs

Noon – 1:00 **Lunch** (on your own)

1:00 – 2:00 **Module 6** – Overview of 15 Non-Prop. BMPs (cont.)

2:00 – 2:45 ***Exercise 3*** – *BMP Sizing*

2:45 – 4:15 **Module 7** – Evaluating Water Quality Compliance

4:15 – 4:45 ***Exercise 4*** – *Water Quality Compliance*

4:45 – 5:00 **Questions and Answers**

Agenda – Day 3

8:30 – 10:00 **Module 8** – Evaluating Water Quantity Compliance

10:00 – 10:15 **Break**

10:15 – 12:30 ***Exercise 5 – Example Site Plan Review***

12:30 – 1:30 **Lunch** (on your own)

1:30 – 2:30 **Module 9** – Final Acceptance

2:30 – 3:30 **Questions and Answers**

Course Goal

basic knowledge and tools

Virginia Stormwater Management Program
(VSMP) plan review program

compliance of regulated land-disturbing
activities (LDAs)

prior to and after construction

Course Objectives

Regulatory requirements for VSMP Plan Reviewers

- VSMP Plan Reviewer's Role
- Construction GP (and termination)
- Post-construction
- Part IIB Technical criteria (EB, VRRM)

VRRM and compliance spreadsheet

- ESD
- Water Quality compliance
- Links to Water Quantity
- Other compliance tools?

Critical elements and Common errors

- BMP specifications
- Water Quality design
- Water Quantity design

References/Resources

Plan Reviews

SWM Plan Review Participant Guide

**SWM Laws,
Regs, Ordinance, Guidance**

1999 and Draft SWM HB

VRRM Documentation

VRRM (CWP) Technical Memo

2011 and Draft 2013 BMP Specs

Other?

Exams

**Plan Reviewer SWM
Participant Guide**

SWM Law & Regulations

**Certification Law &
Regulations**

2011 BMP Specs

Getting to Know Your PG

- Modules 1-9
- **Appendices**
 - I: Sample Completeness Review Checklist
 - II: Sample Technical Plan Review Checklists
 - III: Sample BMP Review Checklists
 - IV: DEQ Plan Submitter's Checklist for Stormwater Management
- Exercise Instruction Sets (Ex. 1-5)
- Resources and References
- Laws and Regulations

Module 1

Introduction to the Virginia Stormwater Management Program

Module 1 Contents

1a. Overview of the Virginia Stormwater Management Program

1b. Training and Certification Requirements

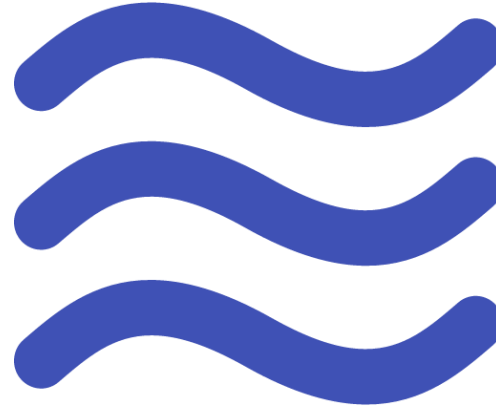
Module 1a.

Overview of the Virginia Stormwater Management Program

Goal



Health
Safety
Welfare



Water quality
Water quantity

Goal

**Before
construction**



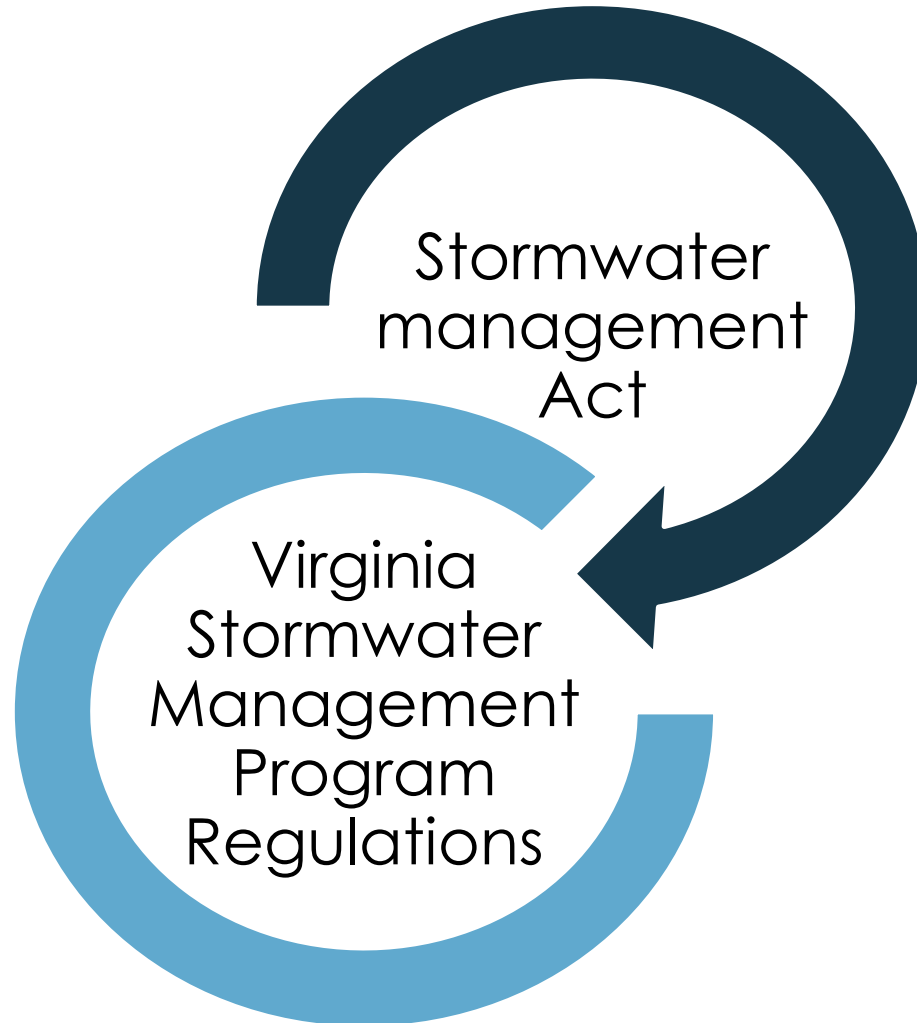
Construction



Post-construction



Authority



VSMP does not limit the applicability of
other laws and regulations



VSMP

- Manage quality and quantity of runoff
 - Local ordinances
 - Policies and guidelines
 - Annual standards and specifications
 - Permit requirements
 - Technical material
 - Plan review
 - Inspection
 - Enforcement

VSMP Authority

- Approved by the Board to operate a VSMP
 - An authority may be:
 - A locality
 - State entity
 - Federal entity
 - A linear utility entity such as electric, natural gas pipeline company, railroad company or others

Requirements to Administer

- The Act requires certain localities to adopt a VSMP and allows other localities and entities to choose whether to adopt or not
- DEQ is the VSMP authority for all localities and entities that do not adopt a VSMP

Requirements to Administer

- VSMP may have agreements with soil and water conservation districts, localities, or other public or private entities to carry out or assist with administering a VSMP
- DEQ is VSMP authority for all localities and entities that do not adopt

Requirements

Localities that **MUST** adopt a VSMP

MS4 Localities

Requirements

Entities that MAY adopt a VSMP

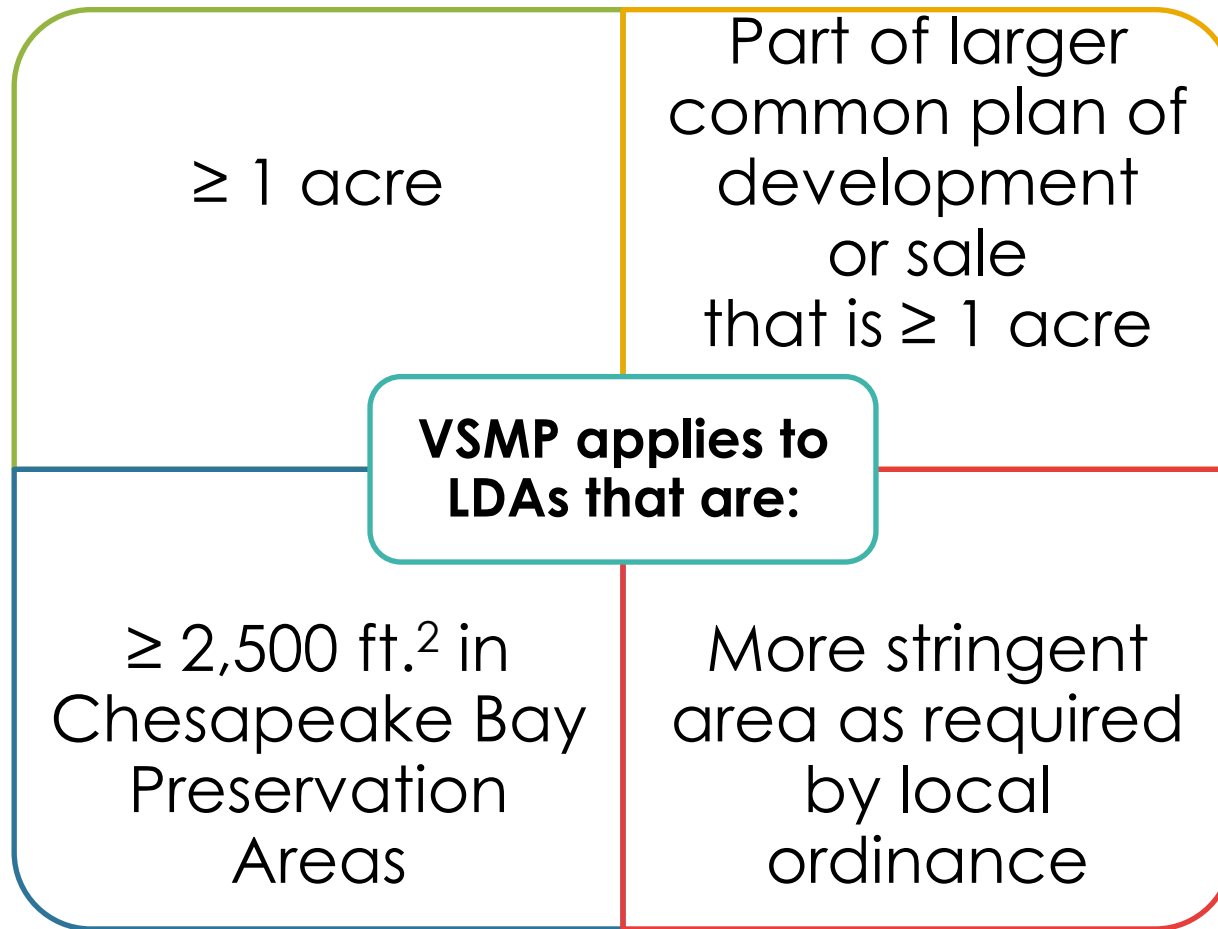
Non-MS4 Localities

- State entities
- Federal entities
- Linear projects subject to annual stds. and specs.

Regulated LDA

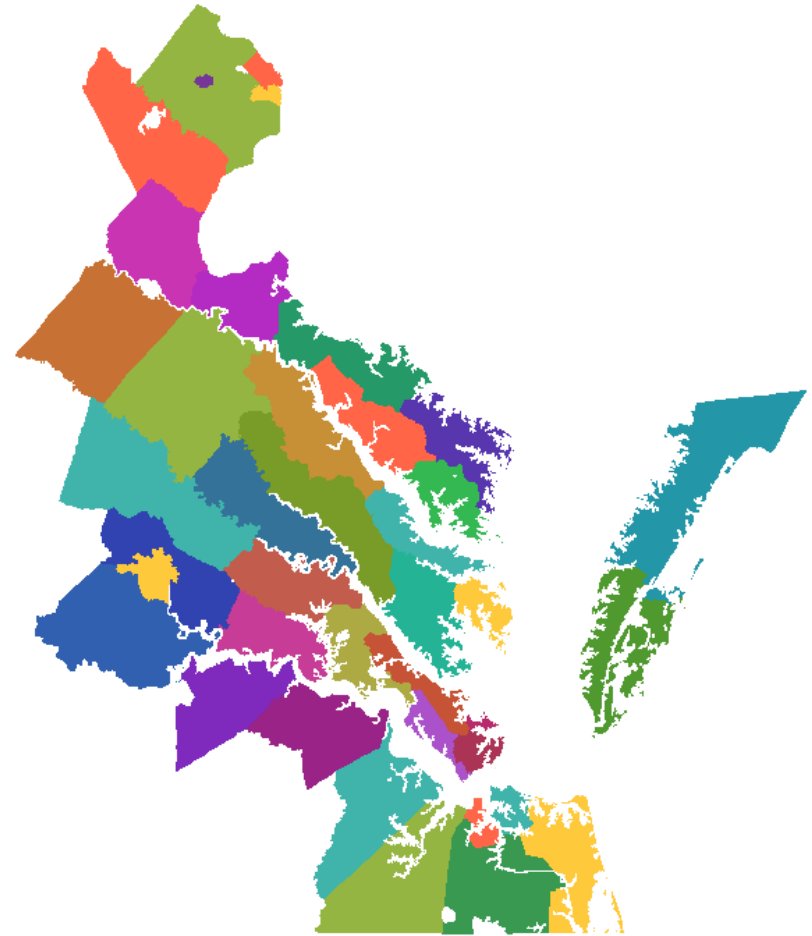
- Manmade change to the land surface that potentially changes its runoff characteristics including:
 - Clearing
 - Grading
 - Excavation

Regulated LDA

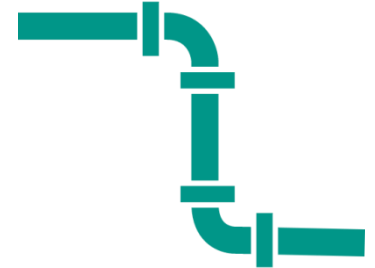


Chesapeake Bay Preservation Act Land-Disturbing Activity

- LDAs $\geq 2,500$ ft.² and
< 1 acre in areas
subject to
Chesapeake Bay
Preservation Area
Designation and
Management
Regulations



Exemptions



Construction GP

- Permit authorizes discharges from construction activities
 - ≥ 1 acre
 - Common plan of development or sale ≥ 1 acre
 - Non compliance with permit = violation of Stormwater Management Act
 - Issued by DEQ

Operator

- Owner or operator subject to Act and Regs
- Under Construction GP
 - Direct operational control over construction plans and specifications, or
 - Day-to-day operational control over activities necessary for complying with SWPPP

Locality VSMP Authority Permit

- Consolidated ESC and SWM
- Must include copy or reference to Construction GP
- Locality approval to start land disturbance after Construction GP issued (if required)

Program Administrator



Inspector



SWPPP



Plan Reviewer



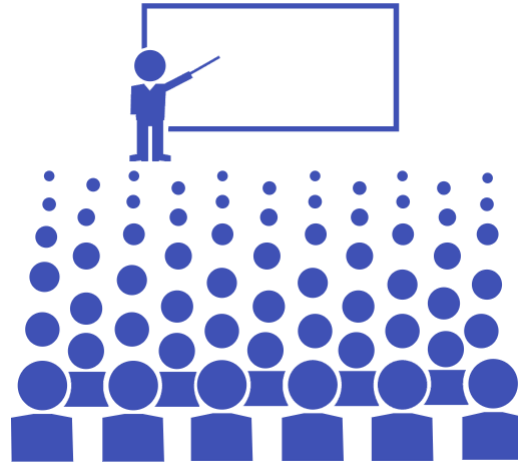
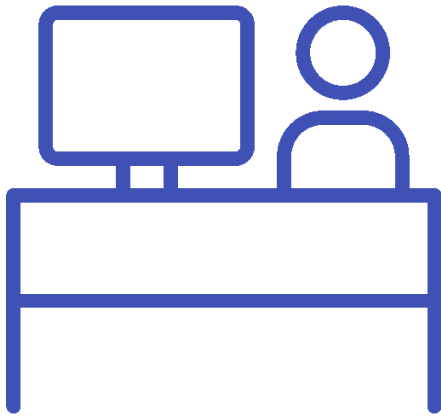
Combined Administrator



State Water Control Board

Permits, regulates and controls stormwater runoff to ensure the general health, safety, welfare of the citizens of the Commonwealth as well as protect the quality and quantity of state waters from the potential harm of unmanaged stormwater.

DEQ



Module 1b.

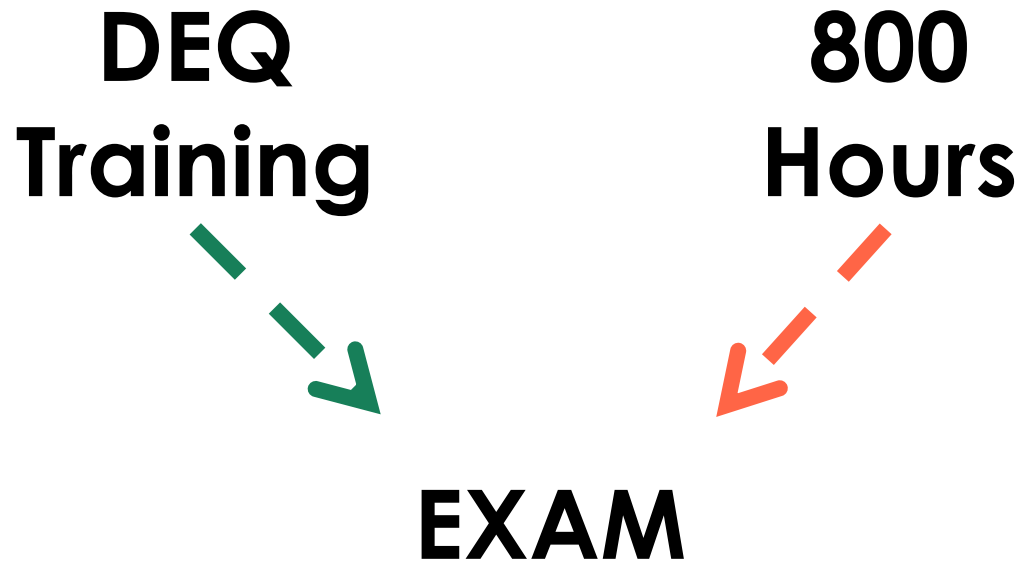
Training and Certification

Who Has to Be Certified?

- VSMP staff
- Anyone contracted by a VSMP authority



How to Obtain a Certificate



DEQ Training Courses

Program
Administrator

**Program
Administrator
1 day**

Inspector

**Inspector
2 days**

Plan Reviewer

**Plan Reviewer
3 days**

Combined
Administrator*

**Program
Administrator
1 day**

**Inspector
2 days**

**Plan Reviewer
3 days**

* The Combined Administrator Courses
may be taken in any order

800 Hours Work Experience

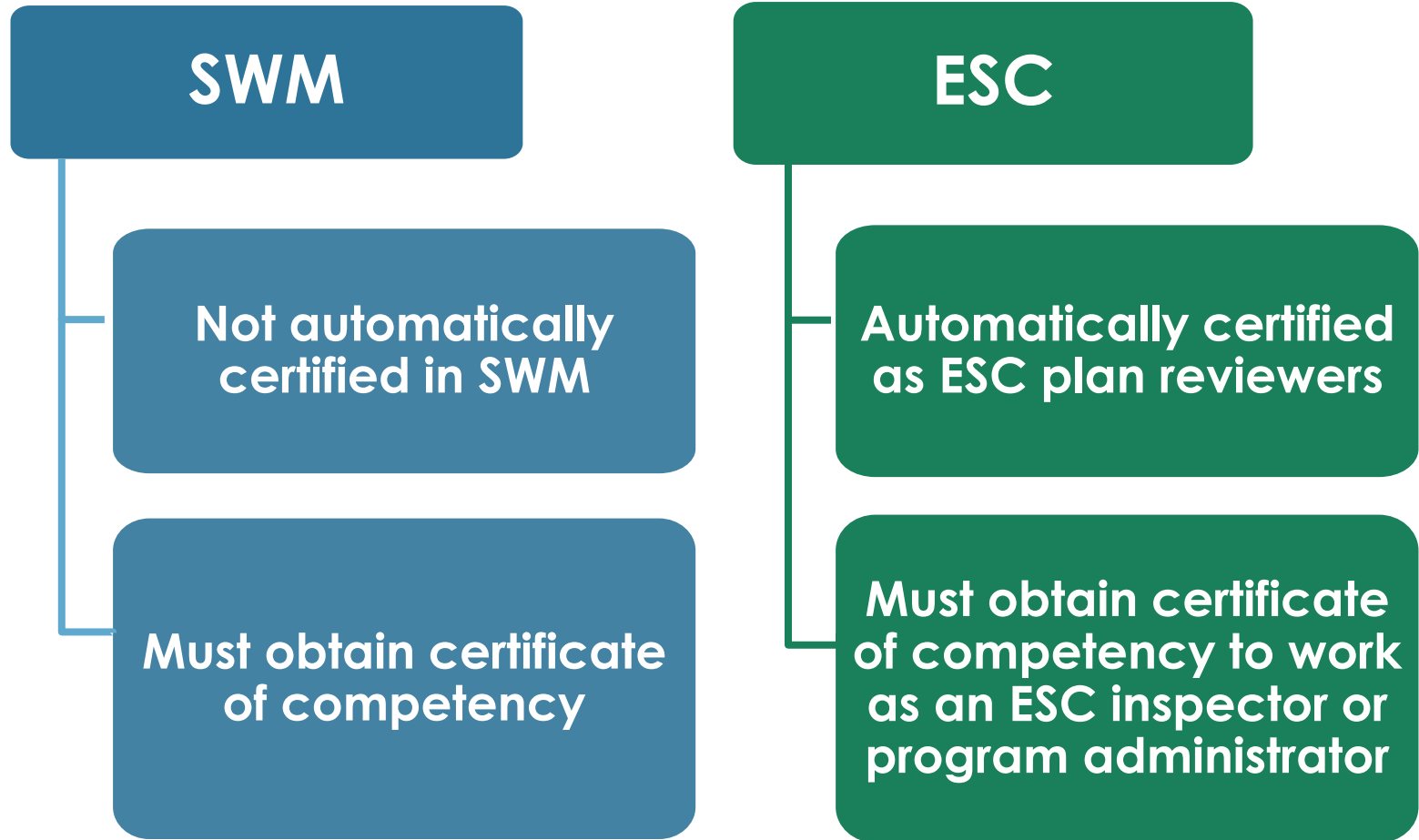
$$\begin{array}{ccccc} \text{800} & & & & \\ \text{Hours} & + & \text{DEQ} & = & \text{Eligible} \\ & & \text{Form} & & \text{for} \\ & & & & \text{exam} \end{array}$$

Provisional Certification

**2
years** **=** **Take
training** **+** **Pass
exam**

You can only be provisionally certified once!

Licensed Professionals



Examination

- Administered by Pearson Vue
 - Taken on a computer
 - Open book

Examination

Program
Administrator
+ Inspector
2 hours

Plan
Reviewer
3 hours

Combined
Administrator
4 hours



Candidate Information Booklet

- Exam reservations
- What to bring
- What not to bring
- Candidate identification
- Course certificates
- Exam content outlines

PEARSON VUE



Quick Reference
inside front cover

Virginia Certification
Requirements
page 1

Examination
Reservations
page 2

Test Sites
page 3

Exam Day:
What to Bring
page 4

Content Outlines
page 8–17

Commonwealth of Virginia
**DEPARTMENT OF
ENVIRONMENTAL
QUALITY**

Candidate Information Booklet

August 2014

SEARCH

ALWAYS LEARNING

PEARSON

Make sure the name on your course
certificate(s) matches your ID



Examination Results

- At least 70% to pass
- Results provided immediately
- Certificate emailed by CATS

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Current RLD certificate? (want to print or renew it)

- [Video - How to use Find My Profile \(4 mins\)](#)
- [Video - How to launch RLD course \(4 mins\)](#)

Expired RLD certificate or New RLD certificate?

- [Video - How to Create New Profile \(5 mins\)](#)

Erosion or Stormwater certified? (renew with contact hours or combine for dual)

- [Video - How to use Find My Profile \(4 mins\)](#)
- [Video - How to enter Contact Hours \(5 mins\)](#)
- [Video - How to add a Professional License \(1 min\)](#)
- [Video - How to combine certifications for Dual Certificate \(2 mins\)](#)

Returning User

[Log In](#)

Log in to maintain your certifications.

New User

[Find My Profile](#)

Already certified? Click here to find your certificate and obtain your login details.

[Create New Profile](#)

Click here if new to CATS and seeking an RLD certificate.

Search

[Search](#)

Search for certificate holders.

Dual Certifications

ESC Program Administrator	+	SWM Program Administrator	=	Dual Program Administrator
ESC Inspector	+	SWM Inspector	=	Dual Inspector
ESC Plan Reviewer	+	SWM Plan Reviewer	=	Dual Plan Reviewer
ESC Combined Administrator	+	SWM Combined Administrator	=	Dual Combined Administrator

Re-Certification



All certificates are valid for 3 years

Re-Certification

Re-certification Options		
Re-take exam	Complete contact hours (\$) <i>Program admin:</i> 12 hours <i>Inspector :</i> 18 hours <i>Plan reviewer:</i> 21 hours <i>Combined admin:</i> 24 hours	Maintain professional license (\$)

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Questions?